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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,968	10/16/2003	Leonard Nanis	NANS 1001-2	8082
22470	7590	08/24/2004	EXAMINER	
HAYNES BEFFEL & WOLFELD LLP P O BOX 366 HALF MOON BAY, CA 94019			EDMONDSON, LYNNE RENEE	
			ART UNIT	PAPER NUMBER

1725

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/686,968	<b>Applicant(s)</b> NANIS, LEONARD	
	<b>Examiner</b> Lynne Edmondson	<b>Art Unit</b> 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-13, 15, 16, 18-23, 25 and 27 is/are rejected.
- 7) ☒ Claim(s) 6, 14, 17, 24, 26 and 28-39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/16/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 7-13, 15, 18, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Nanis et al. (USPN 5695111).

Nanis teaches a method of cleaning oxides from a Nitinol or stainless steel surface comprising the steps of immersing the surface in a molten hydroxide salt and removing the surface from the salt with salt adhering to the surface which solidifies. The salt comprises a mixture of KOH, LiOH and NaOH with a preferred mixture comprising about 59% KOH and about 41% NaOH (col 8 line 60 – col 9 line 25). As the salt is molten, ions are present and presumably more electropositive than the metal component which allows removal of the oxides. The metal is soldered (col 5 line 51 – col 6 line 2 and col 9 lines 22-30). The solder comprises about 80% Au and 20%Sn (col 9 lines 3-10).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

3. Claims 1, 8, 22, 23, 25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Furuno (USPN 4504324).

Furuno teaches a method of cleaning oxides from a metal surface comprising the steps of immersing the surface in a molten hydroxide salt and removing the surface from the salt with salt adhering to the surface which solidifies (col 1 lines 15-56 and col 3 line 47 – col 4 line 49). As the salt is molten, ions are present and presumably more electropositive than the metal component which allows removal of the oxides. Multiple molten salt baths are employed (col 3 lines 5-17).

4. Claims 1, 8, 9, 16 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Mooij et al. (USPN 6379818 B1).

Mooij teaches a method of cleaning oxides from a metal surface comprising the steps of immersing the surface in a molten hydroxide salt and removing the surface from the salt with salt adhering to the surface which solidifies (col 4 line 45 – col 5 line 33 and col 10 lines 48-67). As the salt is molten, ions are present (Table 6) and presumably more electropositive than the metal component which allows removal of the

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oxides. Parts are soldered with pure Sn or a Sn/Pb alloy (col 4 lines 35-43 and col 6 lines 54-63).

5. Claims 1, 2, 4, 5, 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Schilbe et al. (USPN 6475289 B2).

Schilbe teaches a method of cleaning oxides from a metal surface comprising the steps of immersing the surface in a molten hydroxide salt and removing the surface from the salt with salt adhering to the surface which solidifies. The salt comprises a mixture of KOH and NaOH (col 3 lines 14-60).

#### ***Allowable Subject Matter***

6. Claims 6, 14, 17, 24, 26 and 28-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Elmore (USPN 3690921), Yamada (USPN 5939774), Cole et al. (USPN 5505786), Shoemaker et al. (USPN 3625900) and Kitani et al. (JPN 10-121278-A).

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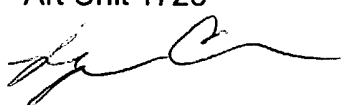
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571) 272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson  
Primary Examiner  
Art Unit 1725

LRE



8/19/04